THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 8

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte OLE K. NILSSEN

Appeal No. 1997-2856 Application 08/394,251¹

ON BRIEF

Before THOMAS, BARRETT, and RUGGIERO, <u>Administrative Patent</u> <u>Judges</u>.

¹ Application for patent filed February 24, 1995, entitled "Compact Screw-In Fluorescent Lamp," which is a continuation-in-part of Application 07/579,569, filed September 10, 1990, now abandoned, which is a continuation-in-part of Application 06/787,692, filed October 15, 1985, now abandoned, which is a continuation of Application 06/644,155, filed August 27, 1984, now abandoned, which is a continuation of Application 06/555,426, filed November 23, 1983, now abandoned, which is a continuation of Application 06/178,107, filed August 14, 1980, now abandoned.

BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 1-6 and 8-31.

We affirm-in-part.

BACKGROUND

The disclosed invention is directed to a U-shaped fluorescent lamp mounted on a screw base for inserting into a lamp socket for an ordinary incandescent light bulb.

Claim 5 is reproduced below.

5. An arrangement comprising:

a screwbase operative to be screwed into a lamp socket of a type functional to receive and hold an ordinary household incandescent light bulb; the screwbase being otherwise characterized by including (i) base terminals, (ii) a threaded portion that is substantially of cylindrical shape, thereby to define a central screw-base axis; the lamp socket having a pair of socket terminals at which is provided an AC power line voltage such as that present at an ordinary electric utility power line; this AC power line voltage being applied to the base terminals whenever the screw-base is indeed screwed into the lamp socket;

a fluorescent lamp including a pair of thermionic cathodes and a pair of lamp terminals; the fluorescent lamp being otherwise characterized by having a central lamp axis and at least two cylindrical lamp sections, each having a cylindrical axis disposed parallel to the central lamp axis; one of the thermionic cathodes being disposed at one end of each of the

cylindrical lamp sections; the other ends of the cylindrical lamp sections being joined together via a transversely disposed lamp section; said transversely disposed lamp section having a maximum dimension no longer that the maximum dimension of one of said cylindrical lamp sections; the fluorescent lamp being further defined by exhibiting symmetry with respect to a flat plane parallel to the central lamp axis;

an electronic sub-assembly having input terminals connected with the base terminals and output terminals connected with the lamp terminals; and

a structure integrally and rigidly combined with the screw-base and operative to hold together the electronic sub-assembly and the fluorescent lamp, such that the central screw-base axis coincides with the central lamp axis.

The Examiner relies on the following prior art:

	Fodor	2,139,815	December 13, 1938				
	Abernathy	2,369,767	February 20,				
1945							
	Greene et al. (Greene)	2,923,856	February 2, 1960				
	Genuit	3,263,122	July 26, 1966				
	Skwirut et al. (Skwirut)	4,300,073	November 10,				
1981							
		(filed February 13,					
1979)							
	Nilssen (Nilssen '637)	5,164,637	November 17, 1992				

Dale et al. (Dale), <u>Conversion of incandescent lamp</u> <u>sockets to fluorescent in the home market</u>, Lighting & Design Application, March 1976, pages 18-23.

The specification stands objected to, and claims 19-21 and 26-31 stand rejected under 35 U.S.C. § 112, first

paragraph, as failing to provide an enabling disclosure and failing to provide an adequate written description.

Claims 5, 6, 8-11, 15, and 18-31 stand rejected under 35 U.S.C. § 103 as being unpatentable over Skwirut in view of either Dale or Abernathy or Greene.

Claims 1, 2, 10, and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Abernathy and Fodor.

Claims 12-14, 16, and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Skwirut, Dale, Abernathy, and Greene as applied in the rejection of claim 10, further in view of Genuit.

Claims 1-4 stand rejected under 35 U.S.C. § 103 as being unpatentable over Skwirut, Dale, Abernathy, Greene, and Genuit.

Claims 3, 4, 12, 13, and 17 stand rejected under the judicially created doctrine of double patenting as being unpatentable over claims 6 and 7 of Nilssen '637 in view of Abernathy and Skwirut. This statement of the rejection in the Final Rejection and the Examiner's Answer appears to be what was intended, while the discussion that "[c]laims 3, 4, 12, 13 and 17 of Nilssen '637 disclose an electronic ballast

sub-assembly" (Final Rejection, page 11) erroneously switches the claims of the application with the claims of the patent.

We refer to the Final Rejection (Paper No. 4) (pages referred to as "FR__") and the Examiner's Answer (Paper No. 7) (pages referred to as "EA__") for a statement of the Examiner's position and to the Appeal Brief (Paper No. 6) (pages referred to as "Br__") for Appellant's arguments thereagainst.

OPINION

Analysis limited to arguments in Appellant's brief

We confine our analysis to issues and differences argued in the brief. See 37 CFR § 1.192(c)(8)(iv) (1995) ("For each rejection under 35 U.S.C. 103, the argument shall specify the errors in the rejection and, if appropriate, the specific limitations in the rejected claims which are not described in the prior art relied on in the rejection, and shall explain how such limitations render the claimed subject matter unobvious over the prior art."). Arguments not made are considered abandoned. Cf. In re Baxter Travenol Labs., 952 F.2d 388, 391, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991) ("It is not the function of this court to examine the claims

in greater detail than argued by an appellant, looking for nonobvious distinctions over the prior art."); In re Wiechert, 370 F.2d 927, 936, 152 USPQ 247, 254 (CCPA 1967) ("This court has uniformly followed the sound rule that an issue raised below which is not argued in this court, even if it has been properly brought here by a reason of appeal, is regarded as abandoned and will not be considered. It is our function as a court to decide disputed issues, not to create them."); In re Wiseman, 596 F.2d 1019, 1022, 201 USPO 658, 661 (CCPA 1979) (arguments must first be presented to the Board before they can be argued on appeal). It is noted that it is improper for an appellant to raise issues for the first time in any request for rehearing, because a request for rehearing is limited to reconsideration of points that were made in the brief. See 37 CFR § 1.197(b) ("The request for reconsideration shall state with particularity the points believed to have been misapprehended or overlooked in rendering the decision and also state all other grounds upon which reconsideration is sought.").

Lack of enablement and/or written description

The Examiner states that there is no support in the specification as originally filed for the limitations:

(1) the distance between adjacent cylindrical sections is not larger than half the dimension across either of the cylindrical sections (claims 19, 20, 21 (by virtue of its dependency), 26, 27, and 28-31 (by virtue of their dependencies)); and (2) the maximum diameter of the fluorescent lamp being no larger than twice the maximum diameter of the screw base (claim 31). The Examiner states that the drawings do not provide support since the drawings are not to scale (FR2).

It is clear that the Examiner's rejection is based on lack of written description under 35 U.S.C. § 112, first paragraph, not on lack of an enabling disclosure of how to make a lamp with these limitations, because the limitations themselves are enough to allow one to make and use. The written description rejection under § 112, first paragraph, is used to reject when a claim is amended to recite elements thought to be without support in the original disclosure. See In re Rasmussen, 650 F.2d 1212, 1214-15, 211 USPQ 323, 326 (CCPA 1981). "Satisfaction of the description requirement

insures that subject matter presented in the form of a claim subsequent to the filing date of the application was sufficiently disclosed at the time of filing so that the prima facie date of invention can fairly be held to be the filing date of the application." Vas-Cath, Inc. v. Mahurkar, 935

F. 2d 1555, 1562, 19 UPSQ2d 1111, 1115 (Fed. Cir. 1991), citing In re Smith, 481 F. 2d 910, 914, 178 USPQ 620, 623 (CCPA 1973).

Appellant argues that any drawing supposed to depict a physical object must be drawn to some specific scale or the drawing will not resemble the object it is supposed to depict (Br5). Appellant argues that the maximum diameter limitation can be determined by direct measurements on figure 1, where "the larger of the two inner diameters is 23 millimeters, while the smaller of the two inner diameters is over 12 millimeters" (Br6).

"[D]rawings alone <u>may</u> be sufficient to provide the 'written description of the invention' required by § 112, first paragraph." <u>Vas-Cath</u>, 935 F.2d at 1564, 19 UPSQ2d at 1117. However, drawings are not manufacturing drawings and are not necessarily drawn to scale. <u>See In re Wilson</u>,

312 F.2d 449, 454, 136 USPQ 188, 192 (CCPA 1963) ("Patent drawings not working drawings ... [and arguments are not persuasive when based on a] drawing obviously never intended to show the dimensions of anything."); In re Wright,
569 F.2d 1124, 1127, 193 USPQ 332, 335 (CCPA 1977)

("[Applicant] does not disclose that his drawings are to scale. Absent any written description in the specification of quantitative values, arguments based on measurement of a drawing are of little value."). It is often the case that elements of the drawing are exaggerated in one or more dimensions to emphasize the salient features of the invention. This does not interfere with identifying what the drawing depicts.

Although not argued by Appellant, the limitation that the distance between adjacent cylindrical sections is not larger than half the dimension across either of the cylindrical sections is found in original claim 19 of the application as filed. Thus, there is express written description support without need to resort to the drawings. The Examiner errs as to this limitation. The rejection of claims 19-21 and 26-31 for this limitation is reversed.

The relationship that the maximum diameter of the fluorescent lamp is no larger than twice the maximum diameter of the screw base is not described expressly or impliedly in the original specification. Our photocopy of the drawings, which should differ only in scale, shows a dimension across the lamp 11 of 0.92 inches (23.37 mm) and a dimension across the top of the thread 17 of 0.49 inches (12.45 mm), which agrees with Appellant's measurements of 23 and 12 millimeters, respectively. Nevertheless, the ratio is so close that one of ordinary skill in the art would not have appreciated that this relationship was an essential part of the invention from looking at the drawing. The relationship could be mere happenstance in the way the drawings were prepared that Appellant wants to rely on to distinguish the claims. Therefore, we sustain the rejection of claim 31.

<u>Obviousness</u>

Claims 5, 6, 8-11, 15, and 18-31

Appellant relies on the limitation in claim 5 that "the other ends of the cylindrical lamp sections being joined together via a transversely disposed lamp section ... having a maximum dimension no longer than the maximum dimension of one

of said cylindrical lamp sections." Appellant argues that "Skwirut's 'ends' are joined together by way of a doubly curved lamp section having a maximum dimension substantially longer than that of one of the two pertinent cylindrical sections" (Br7).

The Examiner responds (EA15): "The maximum diameter dimension of the transversely disposed section of Skwirut is no larger than the maximum diameter dimension of the cylindrical lamp section. Even the maximum length of the transverse section is substantially smaller than the length of the cylindrical lamp section."

One problem is that "a maximum dimension" of the transversely disposed lamp section and "the maximum dimension" of the cylindrical lamp sections are not defined. While, perhaps, the recitation that a maximum dimension of the transverse lamp section is "no longer" than the maximum dimension of the cylindrical lamp section could be interpreted as implying a length dimension, the term "longer" could also refer to the length of the dimension. We interpret the "maximum dimension" to be the greatest dimension for the transverse lamp section and the cylindrical lamp section.

Nothing requires that the "maximum dimension" refer to the same dimension for the transverse lamp section and the cylindrical lamp section; e.g., it would be possible to compare a length with a diameter. The Examiner's interpretation based on the diameter dimension is inconsistent with the claim language because the diameters are clearly not the "maximum dimension" of the transverse lamp section or the cylindrical lamp section in Skwirut. The Examiner's finding that the maximum length of the transverse section is smaller than the length of the cylindrical lamp section is clearly erroneous; the length must be measured along the lamp and the traverse lamp section is approximately twice as long as one of the cylindrical lamp sections.

The Examiner also reasoned (FR6-7): "As to placing a sharp bend in the tube [of Skwirut] to make a U-shape, it is very well known that tubes for gas discharge tubes can be bent to any desired shape and to bend the tube to a single U-shape with a sharp bend would have been obvious to one of ordianry [sic] skill in the art not only given the well known fact that tubes can be bent to that desired [shape] but especially given that of Skwiruit [sic] who teaches multiple U-shapes."

Skwirut discloses that tubular U-shaped bulbs were known in the prior art (e.g., col. 1, lines 31-32). Skwirut's lamp has a U-shape which is then bent in half to form another U-shape. In view of these express teachings, it would have been obvious to use a simple U-shaped lamp in Skwirut if one did not desire the added light provided by the extra lengths of straight lamp sections. Such a U-shaped lamp would meet the maximum dimension limitation of claim 5 as evidenced by comparing U-bent segment 31a in figure 7 with straight segment 24a in figure 5 of Skwirut. We do not think Appellant can seriously claim to have invented the U-shaped lamp having a screw-base, which is all that claim 5 appears to recite. these reasons, we conclude that claim 5 would have been obvious. Claims 6 and 8 have not been separately argued and, therefore, fall with claim 5. The rejection of claims 5, 6, and 8 are sustained.

As to claims 10 and 11, Appellant argues that claim 10/11 recites that "a flat plane disposed perpendicular to the central axis and intersecting one of the cylindrical lamp segments anywhere along its total length creates a cross-sectional pattern that ... includes nothing but cross-

sections of substantially identical cylindrical lamp segments" (emphasis added). It is noted that this limitation appears in claim 10. With respect to similar limitations in claim 9, Appellant argues (Br7): "[A plane] at any location along the central lamp axis [in Skwirut] will clearly intersect something more than 'cylindrical lamp sections and any material enclosed within these cylindrical lamp sections.' For instance, that plane will definitely intersect cover C. Also, in most locations, it will also intersect ballast 15; and, in some locations, it will intersect U-bent segment 31 or tipped-off segment 32."

The lamp in Skwirut, modified to provide a U-shaped lamp as discussed in connection with claim 5, would meet the limitations of claims 9 and 10, except, arguably, for the cover and the ballast.

The Examiner has stated that it would have been obvious to remove the protective cover in Skwirut because such a covering is unnecessary (FR6; EA8; EA15). We agree. The cover is not required for the lamp to function and a plane would not intersect the cover if the cover was not present.

As to intersecting the ballast 15, figure 6 of Skwirut discloses an embodiment with the ballast in the base so that a plane would not intersect the ballast as it would in figure 1.

For the reasons stated above, we conclude that claims 9 and 10 would have been obvious. The rejection of claims 9 and 10 is sustained. The limitations of dependent claims 11, 15, 18, and 19 have not been separately argued and, therefore, these claims fall with claim 10. The rejection of claims 11, 15, 18, and 19 is sustained.

Independent claims 20 and 27 have not been separately argued and do not include limitations similar to those Appellant has argued with respect to claims 5 and 10.

Accordingly, the rejection of claims 20, 21, and 27-31 is sustained pro forma. In addition, we note our agreement with the Examiner's position (FR7) that the distance between the cylindrical lamp sections would have been obvious to one of ordinary skill in the art. Skwirut discloses decreasing the radius of curvature of the U-bends to reduce the spacing between the tubular leg sections when a ballast is not located in the middle of the lamp (col. 8, lines 38-43), which permits "tighter bundling" of the tubular leg segments to reduce the

width (col. 8, lines 55-61). One of ordinary skill in the art would have considered the spacing a lamp parameter to be varied at will.

Independent claim 22 has not been separately argued but includes a limitation similar to claim 10. For the reasons stated with respect to claim 10, the rejection of claim 22 and its dependent claims 23-26 is sustained.

Claims 1, 2, 10, and 18

Appellant argues that Abernathy is missing more than a U-shaped lamp structure. Appellant argues that Abernathy does not disclose that the lamp is adapted to be mounted in a socket designed to accept an "ordinary household incandescent light bulb" as recited in claim 1. The Examiner points out (EA15) that Abernathy discloses in the first sentence that the device is "adapted to be mounted in an ordinary household outlet" (page 1, col. 1, lines 3-4). More clearly, we note that Abernathy discloses that "the entire device may be screwed into an ordinary lighting socket and operated therefrom" (page 2, col. 1, lines 47-49). Appellant's arguments (Br8) that the drawings do not suggest an ordinary screw base and that a vacuum tube of sufficient volt-ampere

capacity could not have been made small enough in 1942 to fit into an ordinary socket are not persuasive in view of the express disclosure in Abernathy.

Appellant argues that Abernathy does not have an enabling disclosure. Patents are presumed to be valid and, thus, to have an enabling disclosure. Moreover, patents are good for everything they teach one of ordinary skill in the art. One of ordinary skill in the art was taught to make a lamp with a high frequency source that could fit in an ordinary lamp socket.

Appellant argues that there is no factual support in

Abernathy or Fodor for the Examiner's reason to modify

Abernathy with a U-shaped tube structure to "prevent the leads

from casting a shadow outside the lamp" (FR8).² Appellant

argues that neither Abernathy nor Fodor suggests such a

problem and the diameter of the lead 27 is so small compared

² Appellant "accuses Examiner of intellectual dishonesty" for his statement because the problem is not found in either reference. Appellant is reminded of 37 CFR § 1.3 which requires applicants to conduct their business with "decorum and courtesy" and that papers in violation of this order will be returned.

to the diameter of tube 25 that it would be impossible to discern any shadow (Br9).

It is true that no shadow problem is expressly disclosed and the Examiner has not demonstrated that one of ordinary skill in the art would have been aware of a shadow problem.

Nevertheless, Fodor shows that other lamp shapes may be used and, absent some argument why Abernathy is limited to a straight lamp, this is all the motivation that is required to replace the straight lamp in Abernathy with one of the shapes in Fodor.

Appellant argues that Abernathy's envelope is needed, referring to page 2, column 1, lines 23-27 (Br10). However, we note that several lines below that portion, Abernathy expressly states that "[t]he envelope 12 may even be omitted entirely in some cases" (page 2, col. 1, lines 31-32). Appellant's argument is not persuasive.

Finally, Appellant argues that the feature of "two straight cylindrical ... sections disposed parallel to each other" is not disclosed or suggested by either reference (Br10). The Examiner responds (EA15-16): "Fodor shows that Abernathy can be U-shaped with parallel or non-parallel tube

sections and in the process the leads to the base are shorten [sic]. Fodor shows that almost any shape can be employed just as long as the ends of the tube are formed in the base of the lamp so as to shorten leads thereto, etc. These are clear advantages taught by Fodor as recited in the final rejection and would have motivated one of ordinary skill in the art."

We agree with the Examiner that a simple U-shape having two parallel straight sections would have been obvious to one of ordinary skill in the art. The fact that such a shape is not expressly shown in Fodor is not persuasive of nonobviousness. One of ordinary skill in the art must be presumed to know something about the art apart from what the references expressly disclose. In re Jacoby, 309 F.2d 513, 516, 135 USPQ 317, 319 (CCPA 1962). All of the letters or symbols in Fodor are inherently U-shaped because they must begin and end on the same plane. A simple letter "I" or number "1" would have a U-shape and is within the scope of the teachings of Fodor.

For the reasons stated above, we consider Appellant's arguments unpersuasive, and the rejection of claims 1, 2, 10, and 18 is sustained.

Claims 12-14, 16, and 17

Appellant argues that the Examiner's finding that

"Skwirut lacks the electronic high frequency ballast being a

half-bridge type" (FR9) is not understood since no such

ballast is being claimed (Br11). The Examiner responds that

"[t]he half-bridge forms the basis of Appellant's invention"

(EA16).

We agree with Appellant that the Examiner's action should address claimed differences. The limitations of the claims do not appear to be inherent characteristic features of a high frequency ballast of a half-bridge type.

With respect to claim 12, the Examiner found that "[t]he ballast of Dale clearly conducts current pulses through the transistor at a frequency equal to the output frequency and whose duration is less that 1/2 the period of the output" (FR9). Appellant argues that the feature of claim 12 is not disclosed by Dale as the Examiner contends. The Examiner responds that the feature of the current pulses being less than 1/2 the period of the output "occurs in the ballast structure of Dale" (EA16).

Dale states that direct current is used to drive a transistor at high frequency which imposes a high frequency AC current on the secondary of the transformer (page 20 under "Solid-state ballast"). This teaches that the transistor is driven at high frequency instead of "at a periodic rate equal to that of the alternating voltage" as recited in claim 12 even if it is true that "each current pulse having a duration distinctly shorter than half of that of a complete cycle of the alternating voltage" because of its high frequency. The Examiner does not state where the limitations of claim 12 are otherwise taught by the references, including Genuit, and thus has failed to establish a prima facie case of obviousness. The rejection of claim 12 is reversed.

Appellant argues that the features of claims 13, 16, and 17 are "neither disclosed nor suggested by any of the applied references" (Brl1; Brl2) and that these features are "not addressed by the Examiner in his Office Action" (Brl1; Brl2). We do not find where the Examiner addresses the specific limitations of claims 13, 16, and 17. Nevertheless, we have examined the references for what they clearly disclose.

We find that none of Skwirut, Dale, Abernathy, Greene, or Genuit discloses a DC voltage having a constant absolute magnitude distinctly larger than the absolute peak magnitude of the AC power line as recited in claims 13 and 17.

Therefore, the rejection of claims 13 and 17 is reversed.

Genuit discloses on its face an inverter with a pair of terminals across which exists a DC voltage and a series-connected pair of transistors as recited in claim 14.

It would have been obvious to use the inverter arrangement of Genuit in Skwirut to achieve the current limiting advantages of Genuit. Therefore, the rejection of claim 14 is sustained.

We find that none of Skwirut, Dale, Abernathy, Greene, or Genuit discloses a pair of terminals across which exists a DC voltage and a series-connected pair of capacitors as recited in claim 16. Therefore, the rejection of claim 16 is reversed.

Claims 1-4

Appellant refers to his arguments at sections (j) through (n) of the brief.

Sections (j) through (n) deal with the rejection of claims 12-14, 16, and 17. Claim 3 is similar to claim 13.

Claim 4 contains limitations similar to claims 14 and 12 together. We reverse the rejection of claims 3 and 4 over Skwirut, Dale, Abernathy, Greene, and Genuit for the reasons stated in reversing the rejection of claims 12 and 13 over the same combination of references.

Appellant further argues that the Examiner's finding that Skwirut lacks a half-bridge ballast fails to make sense (Br13). We agree for the reasons stated with respect to the rejection of claim 12-14, 16, and 17.

The rejection of claims 1 and 2 is sustained for the reasons discussed with respect to claims 5 and 10.

Obviousness-type double patenting

An obviousness-type double patenting rejection prevents an applicant from extending his patent term beyond statutory limits where an application claims merely an obvious variant of the claims in a prior patent. See In re Goodman, 11 F.3d 1046, 1052, 29 USPQ2d 2010, 2015 (Fed. Cir. 1993); In re Vogel, 422 F.2d 438, 441, 164 USPQ 619, 622 (CCPA 1970). Thus, we examine the claims to determine whether one defines merely an obvious variation of the other.

Claims 6 and 7 of Nilssen '637 are directed to an electronic ballast, not to a fluorescent lamp structure as claimed in the present application. The claims of the present application are not to essentially the same invention and are not trying to claim merely an obvious variant of the claims in Nilssen '637. An obviousness-type double patenting rejection is improper in this case. Moreover, since claims 3 and 4 depend on claim 1 and claims 12, 13, and 17 depend on claim 10, it is not apparent why the Examiner has rejected the dependent claims without rejecting the independent claims from which they depend. The rejection of claims 3, 4, 12, 13, and 17 is reversed.

CONCLUSION

The rejections of claims 1, 2, 5, 6, 8-11, 14, 15, and 18-31 are sustained.

The rejections of claims 3, 4, 12, 13, 16, and 17 are reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR $\S 1.136(a)$.

AFFIRMED-IN-PART

JAMES D. THOMAS)		
Administrative Pa	atent	Judge)		
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)	BOARD	OF	PATENT
LEE E. BARRETT	Judge)	APPEALS		
Administrative Patent)	AND		
)	INTERFERENCES		
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)			
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JOSEPH F. RUGGIERO)			
Administrative Patent	Judge)			

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³ We use the address "408 Caesar Drive" because we are aware that this address appeared in other appeals. The street address of record is just "Caesar Drive."